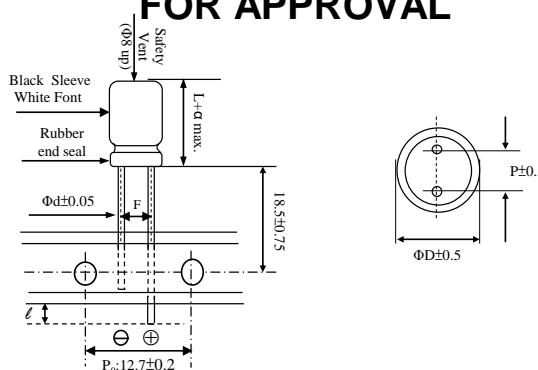


DONG GUAN KUAN KUN ELECTRONIC CO., LTD
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 DONG GUAN CITY, GUANG DONG CHINA (P.R.O.C) FAX: +86-769- 87318008

FOR APPROVAL

DIMENSIONS(mm)

ΦD	10
L	13
α	1.0
P	5.0
F ^{+0.8} _{-0.2}	5.0
ℓ	1.0
Φd	0.6



Customer:	Ozdisan	Electrolytic Capacitors								Su'scon		
		SH Series								Code		
Electric Characteristics:												
Ozdisan	Su'scon	Cap. (uF)	Cap. Tol. (%)	Rate Volt. (V-DC)	Surge Volt. (V-DC)	Oper. Temp. (°C)	Nominal Case Size D*L(mm)	Leakage Current Max (uA)	D.F. MAX (%)	R.C 100KHz (mA rms)	IMP 100KHz at 25°C (Ω)Max	Load Life (hours)
P/N	P/N	220	±20	25	32	125	10*13	55	14	800	0.170	5000

REMARKS:

- 1. Leakage Current Test: 10V ~100V at 20°C for 2 minutes ;160V ~450V at 20°C for 3 minutes.
- 2. Operating temperature: 10V~250V -40°C ~ +125°C ;350V~450V -25°C ~ +125°C ;
- 3. Dissipation Factor Test: at 20°C, 120 Hz.
- 4. Capacitance Test: at 20°C, 120 Hz.
- 5. Ripple Current Test: at 125°C, **100KHz** ;
- 6. Load Life: **5000**hours,subjected to DC voltage with the rated ripple current is applied at 125°C.
- 7. Capacitance Change: Within±25% of initial value;
- tanδ: 200% or less of initial specified value;
According to the specified value which stated in the catalogue to do the life testing;
- Leakage Current: Initial specified value or less;
- 7. Shelf Life: The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours 125°C without voltage applyde. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.
- Capacitance Change : Within±25% of initial value;
- tanδ: 200% or less of initial specified value;
- Leakage Current: Initial specified value or less.
- 8. when have characteristic requested: Load life & shelf life test and etc. , judgment standard reference to our catalogue.

•SPECIFICATION

Voltage Range 工作電壓範圍	10V~100V						160V~450V					
Leakage Current 滴漏電流	$I \leq 0.01CV$ or $3(uA)$,Which is greater.(After 2 minutes application of working voltage)						$I \leq 0.03CV+20(uA)$.(After 3 minutes application of working voltage)					
Dissipation Factor 散逸因素 (損失角) (tan δ)		Measurement Frequency: 120Hz. Temperature: 20°C										
		Rate Voltage(V)	10	16	25	35	50	63~80	100	160	200~250	350~450
		tanδ (MAX)	0.20	0.16	0.14	0.12	0.10	0.10	0.10	0.15	0.20	0.24
When nominal capacitance over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.												

Standards 參照標準 JIS C-5101-4(IEC 60384)

•RIPPLE CURRENT COEFFICIENTS

Frequency coefficient of allowable ripple current

Rated Voltage(V)	Capacitance(uF)	Frequency(Hz)			
		50	120	1k	≥10k
≤ 100	<100	0.75	1.00	1.57	2.00
	100~470	0.80	1.00	1.34	1.50
	>470	0.85	1.00	1.10	1.15
≥ 160	1~100	0.85	1.00	1.40	1.50

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise.

When long life performance is required in actual use, the rms ripple current has to be reduced.

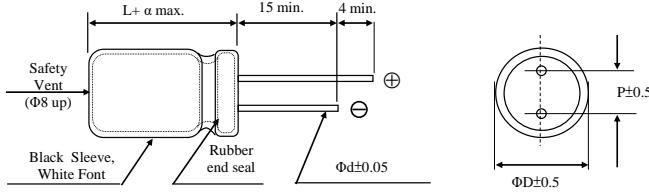
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FOR APPROVAL

DIMENSIONS(mm)

ΦD	10
L	13
α	1.0
P	5.0
Φd	0.6



Customer:	Ozdisan	Electrolytic Capacitors								Su'scon	
		SH Series								Code	

Electric Characteristics:

Ozdisan	Su'scon	Cap. (uF)	Cap. Tol. (%)	Rate Volt. (V-DC)	Surge Volt. (V-DC)	Oper. Temp. (°C)	Nominal Case Size D*L(mm)	Leakage Current Max (uA)	D.F. MAX (%)	R.C 120 Hz (mA rms)	Load Life (hours)
P/N	P/N										
	SH025M331G13PE99S00A	330	±20	25	32	125	10*13	82	14	480	3000

REMARKS:

1. Leakage Current Test:	10V ~100V at 20°C for 2 minutes ;160V ~450V at 20°C for 3 minutes.
2. Operating temperature:	10V~250V -40°C ~ +125°C ;350V~450V -25°C ~ +125°C ;
3. Dissipation Factor Test:	at 20°C, 120 Hz.
4. Capacitance Test:	at 20°C, 120 Hz.
5. Ripple Current Test:	at 125°C, 120 Hz ;
6. Load Life:	3000hours, subjected to DC voltage with the rated ripple current is applied at 125°C.
Capacitance Change:	Within±25% of initial value;
$\tan\delta$:	200% or less of initial specified value;
	According to the specified value which stated in the catalogue to do the life testing;
Leakage Current:	Initial specified value or less;
7. Shelf Life:	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours 125°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.
Capacitance Change :	Within±25% of initial value;
$\tan\delta$:	200% or less of initial specified value;
Leakage Current:	Initial specified value or less.
8. when have characteristic requested:	Load life & shelf life test and etc. , judgment standard reference to our catalogue.

•SPECIFICATION

Voltage Range 工作電壓範圍	10V~100V	160V~450V
Leakage Current 漏漏電流	$I \leq 0.01CV$ or $3(\mu A)$, Which is greater.(After 2 minutes application of working voltage)	$I \leq 0.03CV + 20(\mu A)$.(After 3 minutes application of working voltage)
Dissipation Factor 散逸因素 (損失角) ($\tan\delta$)	Measurement Frequency: 120Hz. Temperature: 20°C Rate Voltage(V) 10 16 25 35 50 63~80 100 160 200~250 350~450 $\tan\delta$ (MAX) 0.20 0.16 0.14 0.12 0.10 0.10 0.10 0.15 0.20 0.24 When nominal capacitance over 1000 μF , $\tan\delta$ shall be added 0.02 to the listed value with increase of every 1000 μF .	
Standards 參照標準	JIS C-5101-4(IEC 60384)	

•RIPPLE CURRENT COEFFICIENTS

Frequency coefficient of allowable ripple current

Rated Voltage(V)	Capacitance(uF)	Frequency(Hz)			
		50	120	1k	≥ 10k
≤ 100	<100	0.75	1.00	1.57	2.00
	100~470	0.80	1.00	1.34	1.50
	>470	0.85	1.00	1.10	1.15
≥ 160	1~100	0.85	1.00	1.40	1.50

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise.
 When long life performance is required in actual use, the rms ripple current has to be reduced.

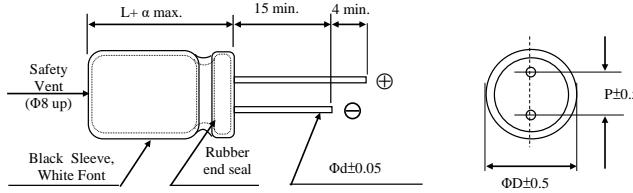
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FOR APPROVAL

DIMENSIONS(mm)

ΦD	16
L	16
α	2.0
P	7.5
Φd	0.8



Customer:		Electrolytic Capacitors SH Series								Su'scon		
Ozdisan										Code		
Electric Characteristics:												
Ozdisan	Su'scon	Cap. (uF)	Cap. Tol. (%)	Rate Volt. (V-DC)	Surge Volt. (V-DC)	Oper. Temp. (°C)	Nominal Case Size D*L(mm)	Leakage Current Max (uA)	D.F. MAX (%)	R.C 120 Hz (mA rms)	IMP 100KHz at 25°C (Ω)Max	Load Life (hours)
P/N	P/N	1000	±20	25	32	125	16*16	250	14	900	0.040	3000

REMARKS:

- 1. Leakage Current Test: 10V ~100V at 20°C for 2 minutes ;160V ~450V at 20°C for 3 minutes.
- 2. Operating temperature: 10V~250V -40°C ~ +125°C ;350V~450V -25°C ~ +125°C ;
- 3. Dissipation Factor Test: at 20°C, 120 Hz.
- 4. Capacitance Test: at 20°C, 120 Hz.
- 5. Ripple Current Test: at 125°C, 120 Hz ;
- 6. Load Life: 3000hours, subjected to DC voltage with the rated ripple current is applied at 125°C.
- Capacitance Change: Within±25% of initial value;
- $\tan\delta$: 200% or less of initial specified value; According to the specified value which stated in the catalogue to do the life testing;
- Leakage Current: Initial specified value or less;
- 7. Shelf Life: The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours 125°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to item 4.1 of JIS C5101-4.
- Capacitance Change : Within±25% of initial value;
- $\tan\delta$: 200% or less of initial specified value;
- Leakage Current: Initial specified value or less.
- 8. when have characteristic requested: Load life & shelf life test and etc. , judgment standard reference to our catalogue.

•SPECIFICATION

Voltage Range 工作電壓範圍	10V~100V						160V~450V					
Leakage Current 洩漏電流	$I \leq 0.01CV$ or 3(uA), Which is greater.(After 2 minutes application of working voltage)						$I \leq 0.03CV + 20(uA)$.(After 3 minutes application of working voltage)					

Dissipation Factor 散逸因素 (損失角) ($\tan \delta$)	Measurement Frequency: 120Hz. Temperature: 20°C										
	Rate Voltage(V)	10	16	25	35	50	63~80	100	160	200~250	350~450
	$\tan\delta$ (MAX)	0.20	0.16	0.14	0.12	0.10	0.10	0.10	0.15	0.20	0.24
When nominal capacitance over 1000μF, $\tan\delta$ shall be added 0.02 to the listed value with increase of every 1000μF.											

Standards 參照標準	JIS C-5101-4(IEC 60384)									
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•RIPPLE CURRENT COEFFICIENTS

Rated Voltage(V)	Capacitance(uF)	Frequency(Hz)			
		50	120	1k	≥ 10k
≤ 100	<100	0.75	1.00	1.57	2.00
	100~470	0.80	1.00	1.34	1.50
	>470	0.85	1.00	1.10	1.15
≥ 160	1~100	0.85	1.00	1.40	1.50

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise.
 When long life performance is required in actual use, the rms ripple current has to be reduced.

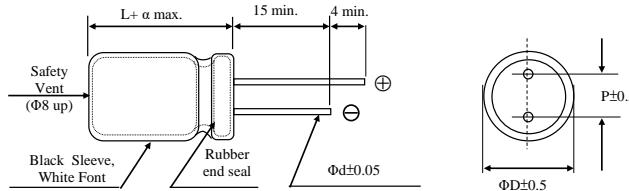
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FOR APPROVAL

DIMENSIONS(mm)

ΦD	16
L	16
α	0.5
P	7.5
Φd	0.8



Customer:		Electrolytic Capacitors SH Series								Su'scon		
Ozdisan		SH Series								Code		
Electric Characteristics:												
Ozdisan	Su'scon	Cap. (uF)	Cap. Tol. (%)	Rate Volt. (V-DC)	Surge Volt. (V-DC)	Oper. Temp. (°C)	Nominal Case Size D*L(mm)	Leakage Current Max (uA)	D.F. MAX (%)	R.C 120 Hz (mA rms)	IMP 100KHz at 25°C (Ω)Max	Load Life (hours)
P/N	P/N	1500	±20	25	32	125	16*16	375	14	980	0.075	2000
REMARKS:												
1. Leakage Current Test: 10V ~100V at 20°C for 2 minutes ;160V ~450V at 20°C for 3 minutes.												
2. Operating temperature: 10V~250V -40°C ~ +125°C ;350V~450V -25°C ~ +125°C ;												
3. Dissipation Factor Test: at 20°C, 120 Hz.												
4. Capacitance Test: at 20°C, 120 Hz.												
5. Ripple Current Test: at 125°C, 120 Hz ;												
6. Load Life: 2000hours, subjected to DC voltage with the rated ripple current is applied at 125°C.												
Capacitance Change: Within±25% of initial value;												
tanδ: 200% or less of initial specified value;												
Leakage Current: According to the specified value which stated in the catalogue to do the life testing;												
Initial specified value or less;												
7. Shelf Life: The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours 125°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.												
Capacitance Change : Within±25% of initial value;												
tanδ: 200% or less of initial specified value;												
Leakage Current: Initial specified value or less.												
8. when have characteristic requested: Load life & shelf life test and etc. , judgment standard reference to our catalogue.												

•SPECIFICATION

Voltage Range 工作電壓範圍	10V~100V				160V~450V																									
Leakage Current 洩漏電流	$I \leq 0.01CV$ or 3(uA), Which is greater.(After 2 minutes application of working voltage)				$I \leq 0.03CV + 20(uA)$.(After 3 minutes application of working voltage)																									
Dissipation Factor 散逸因素 (損失角) (tan δ)	Measurement Frequency: 120Hz. Temperature: 20°C <table border="1"> <tr> <td>Rate Voltage(V)</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63~80</td> <td>100</td> <td>160</td> <td>200~250</td> <td>350~450</td> </tr> <tr> <td>tanδ (MAX)</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.10</td> <td>0.10</td> <td>0.15</td> <td>0.20</td> <td>0.24</td> </tr> </table> When nominal capacitance over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.								Rate Voltage(V)	10	16	25	35	50	63~80	100	160	200~250	350~450	tanδ (MAX)	0.20	0.16	0.14	0.12	0.10	0.10	0.10	0.15	0.20	0.24
Rate Voltage(V)	10	16	25	35	50	63~80	100	160	200~250	350~450																				
tanδ (MAX)	0.20	0.16	0.14	0.12	0.10	0.10	0.10	0.15	0.20	0.24																				

Standards 參照標準 JIS C-5101-4(IEC 60384)

•RIPPLE CURRENT COEFFICIENTS

Frequency coefficient of allowable ripple current

Rated Voltage(V)	Capacitance(uF)	Frequency(Hz)			
		50	120	1k	≥ 10k
≤ 100	<100	0.75	1.00	1.57	2.00
	100~470	0.80	1.00	1.34	1.50
	>470	0.85	1.00	1.10	1.15
≥ 160	1~100	0.85	1.00	1.40	1.50

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise.
 When long life performance is required in actual use, the rms ripple current has to be reduced.

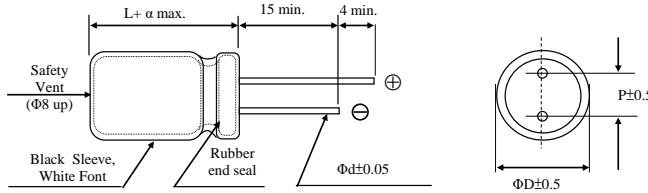
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FOR APPROVAL

DIMENSIONS(mm)

ΦD	16
L	16
α	2.0
P	7.5
Φd	0.8



Customer:		Electrolytic Capacitors SH Series								Su'scon		
Ozdisan										Code		
Electric Characteristics:												
Ozdisan	Su'scon	Cap. (uF)	Cap. Tol. (%)	Rate Volt. (V-DC)	Surge Volt. (V-DC)	Oper. Temp. (°C)	Nominal Case Size D*L(mm)	Leakage Current Max (uA)	D.F. MAX (%)	R.C 120 Hz (mA rms)	Water Rate (%)	Load Life (hours)
P/N	P/N	1500	±20	25	32	125	16*16	375	14	980	≤1.0	3000
REMARKS:												
1. Leakage Current Test:	10V ~100V at 20°C for 2 minutes ;160V ~450V at 20°C for 3 minutes.											
2. Operating temperature:	10V~250V -40°C ~ +125°C ;350V~450V -25°C ~ +125°C ;											
3. Dissipation Factor Test:	at 20°C, 120 Hz.											
4. Capacitance Test:	at 20°C, 120 Hz.											
5. Ripple Current Test:	at 125°C, 120 Hz ;											
6. Load Life:	3000hours,subjected to DC voltage with the rated ripple current is applied at 125°C.											
Capacitance Change:	Within±25% of initial value;											
tanδ:	200% or less of initial specified value;											
According to the specified value which stated in the catalogue to do the life testing;												
Leakage Current:	Initial specified value or less;											
7. Shelf Life:	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours 125°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.											
Capacitance Change :	Within±25% of initial value;											
tanδ:	200% or less of initial specified value;											
Leakage Current:	Initial specified value or less.											
8. when have characteristic requested:	Load life & shelf life test and etc. , judgment standard reference to our catalogue.											

•SPECIFICATION

Voltage Range 工作電壓範圍	10V~100V						160V~450V																	
Leakage Current 洩漏電流	I≤0.01CVor3(uA),Which is greater.(After 2 minutes application of working voltage)						I≤0.03CV+20(uA).(After 3 minutes application of working voltage)																	
Dissipation Factor Measurement Frequency: 120Hz. Temperature: 20°C																								
散逸因素 (損失角) (tan δ) Rate Voltage(V) 10 16 25 35 50 63~80 100 160 200~250 350~450																								
tanδ (MAX) 0.20 0.16 0.14 0.12 0.10 0.10 0.10 0.15 0.20 0.24 When nominal capacitance over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.																								

Standards 參照標準 JIS C-5101-4(IEC 60384)

•RIPPLE CURRENT COEFFICIENTS

Frequency coefficient of allowable ripple current

Rated Voltage(V)	Capacitance(uF)	Frequency(Hz)			
		50	120	1k	≥10k
≤100	<100	0.75	1.00	1.57	2.00
	100~470	0.80	1.00	1.34	1.50
	>470	0.85	1.00	1.10	1.15
≥160	1~100	0.85	1.00	1.40	1.50

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise.
 When long life performance is required in actual use, the rms ripple current has to be reduced.

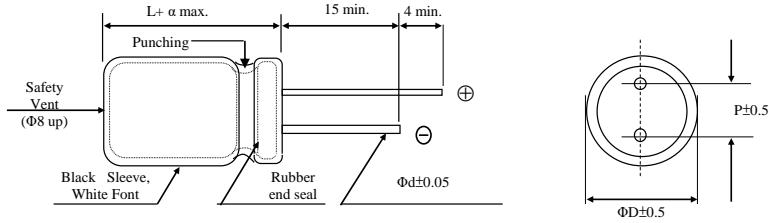
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FOR APPROVAL

DIMENSIONS(mm)

ΦD	8
L	12
α	1.0
P	3.5
Φd	0.5



Customer:		Electrolytic Capacitors SH Series								Su'scon		
Ozdisan		SH Series								Code		
Electric Characteristics:												
Ozdisan	Su'scon	Cap. (uF)	Cap. Tol. (%)	Rate Volt. (V-DC)	Surge Volt. (V-DC)	Oper. Temp. (°C)	Nominal Case Size	Leakage Current Max (uA)	D.F. MAX (%)	R.C 120 Hz (mA rms)	Water Rate (%)	Load Life (hours)
P/N	P/N	220	±20	35	44	125	8*12	77	12	180	≤1.0	2000
REMARKS:												
1. Leakage Current Test:	10V ~100V at 20°C for 2 minutes ;160V ~450V at 20°C for 3 minutes.											
2. Operating temperature:	10V~250V -40°C ~ +125°C ;350V~450V -25°C ~ +125°C ;											
3. Dissipation Factor Test:	at 20°C, 120 Hz.											
4. Capacitance Test:	at 20°C, 120 Hz.											
5. Ripple Current Test:	at 125°C, 120 Hz ;											
6. Load Life:	2000hours, subjected to DC voltage with the rated ripple current is applied at 125°C.											
Capacitance Change:	Within±25% of initial value;											
tanδ:	200% or less of initial specified value;											
Leakage Current:	According to the specified value which stated in the catalogue to do the life testing;											
7. Shelf Life:	Initial specified value or less;											
Capacitance Change :	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours 125°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.											
tanδ:	Within±25% of initial value;											
Leakage Current:	200% or less of initial specified value;											
8. when have characteristic requested:	Initial specified value or less.											

•SPECIFICATION

Voltage Range 工作電壓範圍	10V~100V						160V~450V						
Leakage Current 洩漏電流	I≤0.01CVor3(uA),Which is greater.(After 2 minutes application of working voltage)						I≤0.03CV+20(uA).(After 3 minutes application of working voltage)						
Dissipation Factor 散逸因素 (損失角) (tan δ)		Measurement Frequency: 120Hz. Temperature: 20°C											
		Rate Voltage(V)	10	16	25	35	50	63-80	100	160	200~250	350~450	
		tanδ (MAX)	0.20	0.16	0.14	0.12	0.10	0.10	0.10	0.15	0.20	0.24	
Standards 參照標準		When nominal capacitance over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.											

•RIPPLE CURRENT COEFFICIENTS		JIS C-5101-4(IEC 60384)										
Frequency coefficient of allowable ripple current												

Rated Voltage(V)	Capacitance(uF)	Frequency(Hz)			
		50	120	1k	≥ 10k
≤100	<100	0.75	1.00	1.57	2.00
	100~470	0.80	1.00	1.34	1.50
	>470	0.85	1.00	1.10	1.15
≥160	1~100	0.85	1.00	1.40	1.50

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise.
 When long life performance is required in actual use, the rms ripple current has to be reduced.

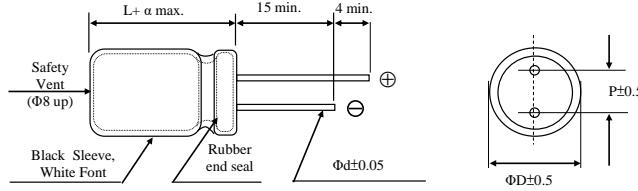
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DONG GUAN KUAN KUN ELECTRONIC CO., LTD
 YIN HE INDUSTRIAL ZONE, QING XI TOWN, TEL: +86-769- 87318000
 DONG GUAN CITY, GUANG DONG CHINA (P.R.O.C) FAX: +86-769- 87318008

FOR APPROVAL

DIMENSIONS(mm)

ΦD	10
L	20
α	2.0
P	5.0
Φd	0.6



Customer:		Electrolytic Capacitors SH Series								Su'scon		
Ozdisan		SH Series								Code		
Electric Characteristics:												
Ozdisan	Su'scon	Cap.	Cap.	Rate	Surge	Oper.	Nominal	Leakage	D.F.	R.C	IMP	Load
P/N	P/N	(uF)	Tol.	Volt.	Volt.	Temp.	Case Size	Current	MAX	100KHz	100KHz	Life
	SH035M471G20PE99S00A	470	±20	35	44	125	10*20	164	12	1130	0.057	3000

REMARKS:

1. Leakage Current Test:	10V ~100V at 20°C for 2 minutes ;160V ~450V at 20°C for 3 minutes.
2. Operating temperature:	10V~250V -40°C~ +125°C ;350V~450V -25°C~ +125°C ;
3. Dissipation Factor Test:	at 20°C, 120 Hz.
4. Capacitance Test:	at 20°C, 120 Hz.
5. Ripple Current Test:	at 125°C, 100K Hz ;
6. Load Life:	3000hours, subjected to DC voltage with the rated ripple current is applied at 125°C.
Capacitance Change:	Within±25% of initial value;
tanδ:	200% or less of initial specified value;
Leakage Current:	According to the specified value which stated in the catalogue to do the life testing;
Initial specified value or less;	
7. Shelf Life:	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours 125°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.
Capacitance Change :	Within±25% of initial value;
tanδ:	200% or less of initial specified value;
Leakage Current:	Initial specified value or less.
8. when have characteristic requested:	Load life & shelf life test and etc. , judgment standard reference to our catalogue.

•SPECIFICATION

Voltage Range 工作電壓範圍	10V~100V				160V~450V						
Leakage Current 洩漏電流	$I \leq 0.01CV$ or $3(\mu A)$, Which is greater.(After 2 minutes application of working voltage)				$I \leq 0.03CV + 20(\mu A)$. (After 3 minutes application of working voltage)						
Dissipation Factor 散逸因素 (損失角) (tan δ)	Measurement Frequency: 120Hz. Temperature: 20°C										
	Rate Voltage(V)	10	16	25	35	50	63~80	100	160	200~250	350~450
	tanδ (MAX)	0.20	0.16	0.14	0.12	0.10	0.10	0.10	0.15	0.20	0.24
When nominal capacitance over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.											
Standards 參照標準	JIS C-5101-4(IEC 60384)										

•RIPPLE CURRENT COEFFICIENTS

Rated Voltage(V)	Capacitance(uF)	Frequency(Hz)			
		50	120	1k	≥10k
≤ 100	<100	0.75	1.00	1.57	2.00
	100~470	0.80	1.00	1.34	1.50
	>470	0.85	1.00	1.10	1.15
≥ 160	1~100	0.85	1.00	1.40	1.50

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise.
 When long life performance is required in actual use, the rms ripple current has to be reduced.

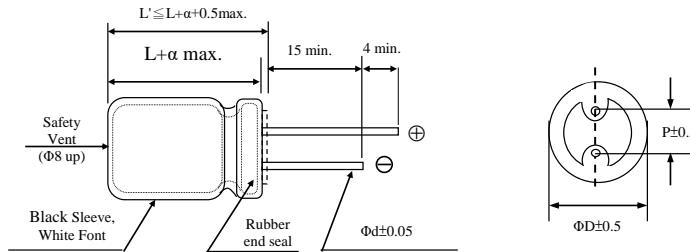
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FOR APPROVAL

DIMENSIONS(mm)

ΦD	12.5
L	20
α	2.0
P	5.0
Φd	0.6



Customer:		Electrolytic Capacitors SH Series								Su'scon	
Ozdisan										Code	
Electric Characteristics:											
Ozdisan	Su'scon	Cap. (μF)	Cap. Tol. (%)	Rate Volt. (V-DC)	Surge Volt. (V-DC)	Oper. Temp. (°C)	Nominal Case Size D*L(mm)	Leakage Current Max (μA)	D.F. MAX (%)	R.C 120 Hz (mA rms)	Load Life (hours)
P/N	P/N	470	±20	50	63	125	12.5*20	235	10	550	2000
REMARKS:											
1. Leakage Current Test:	10V ~100V at 20°C for 2 minutes ;160V ~450V at 20°C for 3 minutes.										
2. Operating temperature:	10V~250V -40°C ~ +125°C ;350V~450V -25°C ~ +125°C ;										
3. Dissipation Factor Test:	at 20°C, 120 Hz.										
4. Capacitance Test:	at 20°C, 120 Hz.										
5. Ripple Current Test:	at 125°C, 120 Hz ;										
6. Load Life:	2000hours, subjected to DC voltage with the rated ripple current is applied at 125°C.										
Capacitance Change:	Within±25% of initial value;										
tanδ:	200% or less of initial specified value;										
According to the specified value which stated in the catalogue to do the life testing;											
Leakage Current:	Initial specified value or less;										
7. Shelf Life:	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours 125°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.										
Capacitance Change :	Within±25% of initial value;										
tanδ:	200% or less of initial specified value;										
Leakage Current:	Initial specified value or less.										
8. when have characteristic requested:	Load life & shelf life test and etc. , judgment standard reference to our catalogue.										

•SPECIFICATION

Voltage Range 工作電壓範圍	10V~100V						160V~450V				
Leakage Current 洩漏電流	I≤0.01CVor3(μA), Which is greater.(After 2 minutes application of working voltage)						I≤0.03CV+20(μA).(After 3 minutes application of working voltage)				
Dissipation Factor 散逸因素 (損失角) (tan δ)	Measurement Frequency: 120Hz. Temperature: 20°C										

Rate Voltage(V)	10	16	25	35	50	63~80	100	160	200~250	350~450
tanδ (MAX)	0.20	0.16	0.14	0.12	0.10	0.10	0.10	0.15	0.20	0.24

When nominal capacitance over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.

Standards 參照標準	JIS C-5101-4(IEC 60384)									
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•RIPPLE CURRENT COEFFICIENTS

Rated Voltage(V)	Capacitance(μF)	Frequency(Hz)			
		50	120	1k	≥ 10k
≤ 100	<100	0.75	1.00	1.57	2.00
	100~470	0.80	1.00	1.34	1.50
	>470	0.85	1.00	1.10	1.15
≥ 160	1~100	0.85	1.00	1.40	1.50

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise.
 When long life performance is required in actual use, the rms ripple current has to be reduced.

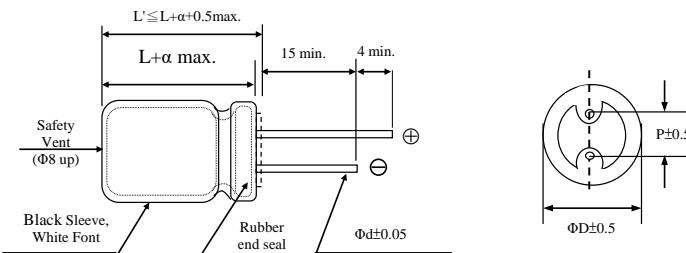
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FOR APPROVAL

DIMENSIONS(mm)

ΦD	18
L	25
α	2.0
P	7.5
Φd	0.8



Customer:		Electrolytic Capacitors SH Series								Su'scon	
Ozdisan		SH Series								Code	
Electric Characteristics:											
Ozdisan	Su'scon	Cap. (μF)	Cap. Tol. (%)	Rate Volt. (V-DC)	Surge Volt. (V-DC)	Oper. Temp. (°C)	Nominal Case Size D*L(mm)	Leakage Current Max (μA)	D.F. MAX (%)	R.C 120 Hz (mA rms)	Load Life (hours)
P/N	P/N	1200	±20	50	63	125	18*25	600	10	1100	5000
REMARKS:											
1. Leakage Current Test:	10V ~100V at 20°C for 2 minutes ;160V ~450V at 20°C for 3 minutes.										
2. Operating temperature:	10V~250V -40°C ~ +125°C ;350V~450V -25°C ~ +125°C ;										
3. Dissipation Factor Test:	at 20°C, 120 Hz.										
4. Capacitance Test:	at 20°C, 120 Hz.										
5. Ripple Current Test:	at 125°C, 120 Hz ;										
6. Load Life:	5000hours, subjected to DC voltage with the rated ripple current is applied at 125°C.										
Capacitance Change:	Within±25% of initial value;										
tanδ:	200% or less of initial specified value;										
Leakage Current:	According to the specified value which stated in the catalogue to do the life testing;										
7. Shelf Life:	Initial specified value or less;										
Capacitance Change :	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours 125°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.										
tanδ:	Within±25% of initial value;										
Leakage Current:	200% or less of initial specified value;										
8. when have characteristic requested:	Initial specified value or less.										
•SPECIFICATION											

Voltage Range 工作電壓範圍	10V~100V								160V~450V													
Leakage Current 洩漏電流	$I \leq 0.01CV$ or 3(uA), Which is greater.(After 2 minutes application of working voltage)								$I \leq 0.03CV + 20$ (uA). (After 3 minutes application of working voltage)													
Dissipation Factor 散逸因素 (損失角) (tan δ)		Measurement Frequency: 120Hz. Temperature: 20°C																				
		Rate Voltage(V)	10	16	25	35	50	63~80	100	160	200~250											
		tanδ (MAX)	0.20	0.16	0.14	0.12	0.10	0.10	0.10	0.15	0.20											
When nominal capacitance over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.																						
Standards 參照標準	JIS C-5101-4(IEC 60384)																					
•RIPPLE CURRENT COEFFICIENTS																						
Frequency coefficient of allowable ripple current																						
Rated Voltage(V)	Capacitance(μF)	Frequency(Hz)																				
		50		120		1k		≥ 10k														
≤ 100	<100	0.75		1.00		1.57		2.00														
	100~470	0.80		1.00		1.34		1.50														
	>470	0.85		1.00		1.10		1.15														
≥ 160	1~100	0.85		1.00		1.40		1.50														

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise.
 When long life performance is required in actual use, the rms ripple current has to be reduced.
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